

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

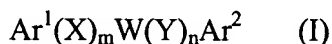
Listing of Claims:

1. (Currently Amended) A compound capable of binding to a picornavirus capsid, the compound comprising:

at least two or more capsid binding moieties, and covalently attached to
a non-polymeric backbone or core,

wherein the at least two capsid binding moieties are covalently attached to the non-polymeric backbone or core,

and wherein the at least two capsid binding moieties are the same or different and individually selected from ~~are functional binding residues of a compound of formula (I):~~



where Ar^1 and Ar^2 are optionally substituted aryl groups, which may be the same or different;

X and Y are independently selected from O, S, CO, C(O)O, CONR or NR,
where R is hydrogen or C₁₋₆ alkyl;

W is a divalent spacer group; and

m and n are independently 0 or 1.

2. (Currently Amended) The compound of A ~~compound according to claim 1~~ wherein the at least two capsid binding moieties are capable of binding to picornavirus capsid ~~is a HRV capsids capsid.~~

3. (Cancelled)

4. (Currently Amended) The compound of claim 2 ~~A compound according to claim 1~~ wherein the at least two capsid binding moieties are ~~covalently attached to the non-polymeric backbone or core, such that two capsid binding moieties are~~ capable of simultaneously binding able to bind within separate hydrophobic pockets on the same or different HRV capsids ~~simultaneously~~.

5. (Currently Amended) The compound of ~~A compound according to~~ claim 1 having a molecular weight of less than 10,000.

6. (Currently Amended) The compound of ~~A compound according to~~ claim 4 wherein the non-polymeric backbone or core is selected from the group consisting of: the residue of

a straight chain, branched or cyclic C₁-C₇₀ alkyl optionally including one or more double or triple bonds and optionally including one or more heteroatoms selected from oxygen, sulfur and nitrogen;

oligomers of amino acids, acrylamide, N-substituted acrylamides, acrylic acid, alkeneoxy moieties, aminoalkanoic acids, and carbohydrates;

small to medium sized dendritic cores; and

cyclodextrins.

7. (Currently Amended) The compound of claim 1 ~~A compound according to claim 4~~ wherein the non-polymeric backbone or core comprises ~~includes~~ two or more linker groups to which the two or more capsid binding moieties are attached, each ~~the~~ linker group ~~groups~~ being capable of passing through the picornaviral pore and having a length sufficient to allow the attached ~~said~~ capsid binding moiety to reach inside and bind within a hydrophobic pocket of the ~~a~~ picornaviral capsid.

8. (Currently Amended) The compound of ~~A compound according to~~ claim 7 wherein the two or more linker groups are the same or different and independently selected

from the group consisting of alkyl, aryl, alkenyl, alkynyl, alkyleneoxy, amino acids, alkylamino, alkylcarbonyl, alkylcarboxy, alkoxy, alkylurea, alkythydrazide and combinations thereof.

9. (Currently Amended) The compound of A ~~compound according to~~ claim 7 wherein the non-polymeric backbone or core and/or the two ~~one or more~~ of the linker groups comprises ~~includes~~ a functional group ~~or moiety~~ which imposes restrictions on available degrees of freedom.

10. (Currently Amended) The compound of A ~~compound according to~~ claim 9 wherein the functional group ~~or moiety~~ is an alkenyl, aryl or amido group.

11. (Currently Amended) The compound of A ~~compound according to~~ claim 4 wherein the two or more capsid binding moieties comprise ~~having~~ between two and ten capsid binding moieties.

12. (Currently Amended) The compound of A ~~compound according to~~ claim 11 comprising ~~having~~ five capsid binding moieties located on the non-polymeric backbone or core such that they bind within the five hydrophobic pockets located about one of the fivefold icosahedral axes of the ~~a~~ picornaviral capsid.

13. (Currently Amended) The compound of A ~~compound according to~~ claim 1 wherein the two or more capsid binding moieties are covalently attached to the non-polymeric backbone or core such that the compound is in the form of a ~~symmetrical~~ dimer with a center of symmetry.

14. (Cancelled)

15. (Currently Amended) The compound of A ~~compound according to~~ claim 1 wherein the divalent spacer group W is selected from the group consisting of optionally

substituted straight chain or branched alkylene groups of from 1 to 10 carbon atoms which may have one or more double or triple bonds; optionally substituted alkyleneoxy groups; optionally substituted aryl groups; and optionally substituted aliphatic rings which may be saturated or unsaturated and which may include one or more heteroatoms selected from O, S and N.

16. (Currently Amended) ~~The compound of A compound according to claim~~ 15 wherein the divalent spacer group is selected from the group consisting of $-(CH_2)_m-$ where m is 1 to 9; and $-(CH_2)_p-Z-(CH_2)_q-$ where p and q are independently 0 to 4, and Z is an optionally substituted C_2-C_6 alkylene group containing one or more double or triple bonds; or a five or six membered ~~5 of 6 membered~~ aromatic or aliphatic ring which may contain one to four heteroatoms selected from O, S and N, ~~and p and q are independently 0 to 4.~~

17. (Currently Amended) ~~The compound of A compound according to claim~~ 15 wherein the divalent spacer group is selected from the group consisting of $-(CH_2)_m-$ where m is 2 to 7; and a group of the formula $-(CH_2)_p-Z-(CH_2)_q-$ where p and q are independently 0 to 3, and Z is a five or six membered aromatic or aliphatic ring containing from 1 to 2 N atoms; or a group of the formula $-(CH=CH)_n-$ where n is 1 to 3.

18. (Cancelled)

19. (Currently Amended) ~~The compound of A compound according to claim~~ 4 ~~in which the~~ wherein each of the two or more capsid binding moieties is ~~are~~ covalently attached to the non-polymeric backbone or core at a position on the two or more capsid binding moieties moiety located in the region at the end of the two or more capsid binding moieties moiety which lies near the pore of the hydrophobic pocket (heel region) during binding.

20. (Currently Amended) ~~The compound of A compound according to claim~~ 19 wherein each of the two or more capsid binding moieties moiety contains a functional group at its heel region capable of forming a covalent bond with the non-polymeric backbone or core,

wherein the functional group is located in the region at the end of the capsid binding moiety which lies near the pore of the hydrophobic pocket (heel region) during binding.

21. (Currently Amended) The compound of A compound according to claim 20 wherein the functional group is selected from the group consisting of a hydroxy, amine, azide, aldehyde, carboxylic acid, amide, ester, hydrazide, oxime ether ethers, imidazolidine, hydroxamate, thioester, mercapto, halide, ketone, hydrazine, isocyanate and isothiocyanate.

22. (Currently Amended) The compound of A compound according to claim 20 wherein the covalent bond bonds between the at least two capsid binding moieties and the non-polymeric backbone or core are is—formed between the functional group and a complementary functional group on a linker group of the non-polymeric backbone or core.

23. (Currently Amended) A compound comprising a capsid binding moiety and having covalently attached thereto to a non polymeric backbone or core or backbone, the non polymeric backbone or core having at least one functional group covalently attached thereto that is capable of reacting with functionalised capsid binding moieties and/or detectable labels.

24. (Currently Amended) A process for the preparation of the a compound of claim 20 as claimed in claim 4, comprising: including

providing the at least two or more capsid binding moieties, each of the two or more capsid binding moieties comprising a functionalised capsid binding compound containing a first functional group located in the region at the end of the capsid binding moiety which lies near the pore of the hydrophobic pocket at its heel region during binding,

providing a functionalised non-polymeric backbone or core comprising containing two or more second functional groups complementary to the said first functional groups, and

reacting the first functional groups said functionalised capsid binding compound with the second functional groups said functionalised backbone or core to form a covalent bond

between said the two or more capsid binding moieties ~~compound~~ and the non-polymeric said backbone or core.

25. (Currently Amended) The A process of claim 24, further comprising the step of for preparing a compound of claim 4 including providing a functionalised capsid binding compound containing a first functional group at its heel region, attaching a linker group to each of the first functional groups, wherein each of the linker groups comprise a third functional group, and reacting the third functional groups with the second functional groups to form a covalent bond between linker groups and the non-polymeric backbone or core said functionalised capsid binding compound via said functional group, said linker group possessing a second functional group capable of reacting with a backbone or core, providing a functionalised backbone or core containing two or more functional groups complementary to said second functional groups, and reacting said capsid binding compound having attached linker with said functionalised backbone or core to form a covalent bond between said linker and said backbone or core, such that said linker becomes part of the backbone or core.

26. (Currently Amended) The process of claim 24 wherein the A compound according to claim 1 including at least two or more different capsid binding moieties are not all the same.

27. (Currently Amended) A method for treating a ~~the treatment of~~ picornavirus infection, comprising including the step of administering an effective amount of a compound of claim 1 ~~capable of binding to a picornavirus capsid comprising two or more capsid binding moieties.~~

28. (Currently Amended) The A method of according to claim 27 wherein the picornavirus is selected from the group consisting of human rhinoviruses, polioviruses, enteroviruses, hepatoviruses, cardioviruses, aphthovirus and hepatitis A.

29. (Cancelled)

30. (Currently Amended) A pharmaceutical composition comprising a compound of according to claim 1, or a pharmaceutically acceptable salt thereof, together with a pharmaceutically acceptable carrier.

31. (Currently Amended) The A method of according to claim 27 wherein the said compound is administered in combination with known antiviral or anti-retroviral agents or other pharmaceuticals used in the treatment of viral infections.

32. (Currently Amended) An agent for detecting picornaviral infections in mammals, comprising a compound of according to claim 1 linked to a detectable label.

33. (Currently Amended) A method for the diagnosis of picornaviral infections in mammals, comprising: including

preparing a biological sample suspected of containing picornavirus,

incubating the said sample with an agent of claim 32 or a compound of claim 23 comprising a detectable label, the incubation occurring for a time and under conditions sufficient to form a virus-agent or virus-compound complex, and

detecting the presence or absence of such virus agent or virus-compound complex.